USING THE MACINTOSH DUO MINIDOCK

The Macintosh Duo MiniDock is an option for the PowerBook Duo. The minidock allows you to connect a wide variety of devices to the PowerBook. A minidock system can have many of the same capabilities as a desktop Macintosh.

A Duo MiniDock with peripheral devices connected to it is not a computer -- you need a PowerBook Duo to make the system work.

This guide explains how to set up the Duo MiniDock and connect other components to it to create a Macintosh Duo System. For information about using the Macintosh system software or the PowerBook Duo, consult your Macintosh PowerBook Duo User's Guide.

The drawing shows one of many possible Macintosh Duo Systems. You can use any Macintosh-compatible monitor, keyboard, mouse, printer, hard disk drive, CD-ROM drive, scanner, or other device.

The following sections include information about

- the features of the Duo MiniDock
- how to set it up
- how to use it with the PowerBook Duo

Duo MiniDock features

The Duo MiniDock allows you to use the following types of equipment with your PowerBook Duo:

- any one of these Apple monitors: Macintosh 12" Monochrome Display Macintosh 12" RGB Display AppleColor High-Resolution RGB Monitor (13") Macintosh Color Display (13") Apple Macintosh Portrait Display (15") Macintosh 16" Color Display
- up to three Apple Desktop Bus (ADB) input devices, such as a keyboard and mouse
- an external 1.4 MB floppy disk drive
- up to six SCSI devices including hard disk drives, CD-ROMdrives, and scanners
- a printer
- an external modem
- a LocalTalk network

Setting up the Duo MiniDock

Your Macintosh Duo System may be simple or complex, depending on the equipment you want to use with your PowerBook Duo. As you work through these instructions, skip any steps that don't apply.

The setup procedure involves connecting your equipment to the Duo MiniDock and then connecting the PowerBook Duo. If you connect the PowerBook first and add equipment to the minidock later, the computer may not be able to recognize the additional equipment until you restart. Remember that the system is not a computer at all unless the PowerBook Duo is attached to it.

1. Place your equipment where you'll be using it.

While you set up, you'll need access to the connectors on the back of the Duo MiniDock.

If you are using an external monitor, make sure your work surface can support its weight. You may want to use a monitor stand so you can adjust the screen position.

2. If you are connecting an external monitor, SCSI equipment, a printer, or an external modem, plug in the power adapter.

The power adapter comes with your PowerBook Duo. Plugthe power adapter cable into the Duo MiniDock (marked with the icon), and then plug the adapter's power cord or wall mount plug into an electrical outlet or power strip.

!! WARNING: Use only the power adapter that came with your PowerBook Duo. Adapters for other electronic devices (including other portable computers) may look similar, but they may damage your computer. !!

If you are connecting only an external floppy disk drive, a keyboard, and/or a mouse, you don't need to plug in the power adapter.

3. If you are connecting an external monitor, plug the monitor's power cord into an electrical outlet or power strip. Then connect the monitor's video cable to the video port (marked with the icon) on the Duo MiniDock.

You may find that your monitor's power cord is designed to plug into the power receptacle on the back of a computer, rather than into an electrical outlet. Your authorized Apple dealer can supply a power cord with the correct plug.

4. If you are using a keyboard and/or mouse, connect it to the Apple Desktop Bus (ADB) port on the Duo MiniDock.

Since the minidock has one ADB port, you'll need to chain devices together if you are connecting more than one. For example, connect a keyboard to the ADB port, and then connect a mouse to the keyboard.

- 5. If you are using an external floppy disk drive, connect its cable to the floppy disk drive port (marked with the icon).
- 6. If you are using any other peripheral devices, such as an external hard disk drive or a printer, connect them now.

Follow the instructions that came with the device.

If you are connecting a SCSI device, you'll need an HDI-30 SCSI System Cable to attach the SCSI device to the Duo MiniDock. See the section on using SCSI devices for complete information about connecting SCSI devices to your Macintosh Duo System.

7. If you are using a LocalTalk network, connect your LocalTalk cable.

Follow the instructions that came with the cable, or check with your network administrator.

More about modem and printer ports

Several kinds of devices can be connected to the modem and printer ports on the Duo MiniDock, but you can use only two such devices at a time. The chart shows which devices can be connected to which ports.

Device type	Modem port	Printer port
Direct-connect printer	yes	yes
Network printer	yes	yes
External modem	yes	no

Local Talk cable

yes

yes

Before using a device connected to the modem or printer port, you need to select it -- usually by clicking an option in the Chooser or in the PowerBook control panel (both available from the Apple menu). See "Working with a Macintosh Duo System" later in this guide for more information.

When you have finished connecting your equipment to the Duo MiniDock, you are ready to connect the PowerBook and begin using your Macintosh Duo System.

Before you dock

Before you connect the PowerBook Duo to the Duo MiniDock, the computer must be shut down or in sleep.

Shut down for access to all devices

Docking with the computer shut down gives you access to SCSI devices such as a hard disk drive or CD-ROM drive. The computer can only recognize these devices when it is turned on (after having been off). When you turn the computer on, it recognizes all attached devices (including an external monitor, floppy disk drive, and keyboard).

Sleep for access to everything except SCSI devices

Docking with the computer in sleep gives you faster access to most devices, including an external monitor, floppy disk drive, keyboard, and mouse. The computer can recognize these devices immediately when you wake it from sleep, provided they were attached to the minidock before you connected the computer.

Docking when the computer is in sleep does not give you access to SCSI devices until you restart the computer.

Don't dock with the computer turned on

If you try to connect to the Duo MiniDock with the PowerBook Duo turned on, the computer will turn itself off. This process erases any information you did not save.

Before-you-dock summary

The computer can recognize the following devices when you wake it from sleep, provided they were attached to the minidock before you connected the computer:

- external monitor
- floppy disk drive
- keyboard and mouse
- direct-connect printer
- external modem
- any sound input or output device

The computer can't recognize SCSI equipment (such as a hard disk drive, CD-ROM drive, or scanner) until you restart.

Connecting the PowerBook Duo to the Duo MiniDock

1. Make sure the PowerBook Duo is in sleep or shut down.

If the PowerBook is on when you try to connect it to the minidock, the computer will turn itself off. This process erases any information you did not save.

- 2. Pull up on the latch at the top of the Duo MiniDock.
- 3. Slide the posts on the minidock into the corresponding holes on the back of the PowerBook, and then gently push the two devices together.
- 4. Push down on the latch at the top of the minidock to secure the connection.

The computer is not docked until the latch is pushed down.

Turning on the Macintosh Duo System

- 1. If you are using an external monitor or SCSI equipment (such as an external hard disk drive), turn it on now.
- 2. Turn on or wake the PowerBook Duo by pressing its Power On key.

You can also turn on or wake the computer by pressing the Power On key on your external keyboard, if you have one.

The Power On key is marked with a triangle pointing left.

Making your external monitor the main monitor

If you are using an external monitor with your Macintosh Duo System, you'll probably want to use it as the main monitor (the one on which the menu bar appears).

To make the external monitor your main monitor, follow these steps. You can only do this when your PowerBook is connected to the Duo MiniDock.

1. Choose Control Panels from the Apple menu, and open the Monitors control panel.

In the control panel you'll see two rectangles representing your two monitors.

- 2. Drag the menu bar from the small rectangle (representing your PowerBook screen) to the large rectangle (representing your external monitor).
- 3. Choose Restart from the Special menu.

You must choose Restart for the new monitor configuration to take effect.

The PowerBook's screen is the main monitor whenever the computer is not docked -- this requires no action on your part.

Trouble?

- Nothing happened when you tried to turn on the PowerBook Duo.

Make sure that all your equipment is connected properly, and try pressing the Power On key again.

The battery may be drained. Plug in the power adapter and then try pressing the Power On key again.

The Duo MiniDock might be damaged. See the service and support information in your Macintosh PowerBook Duo User's Guide for help.

- The system is on, but the external monitor is dark.

Make sure the monitor's power switch is on. Adjust the monitor's brightness and contrast

settings.

- You want the menu bar to appear on the external monitor, but it appears on the PowerBook's screen.

You may need to select the external monitor as your main monitor. Open the Monitors control panel and make sure that the white bar appears on the rectangle representing the external monitor. If it doesn't, drag it there and restart the computer.

- The computer displayed a message saying that you had to restart the PowerBook to get access to attached devices, and you clicked OK, but you still don't have access.

Clicking 0K sends the message away, but it doesn't restart the computer. Choose Restart from the Special menu.

- The icon of the external hard disk doesn't appear on the desktop.

To get access to an external hard disk drive, you must either restart the computer, or connect the computer to the minidock with the computer shut down.

- 1. Choose Shut Down from the Special menu.
- 2. Turn on your external hard disk drive and give it a few seconds to warm up.
- 3. Press the Power On key to turn on the computer.
- You want the system to start up from the external hard disk, but it starts up from the hard disk inside your PowerBook.

Restart your computer. If that doesn't work, check to make sure that the external hard disk has a System Folder on it (containing system software version 7.1 or later) and that you have selected that disk in the Startup Disk control panel.

Working with a Macintosh Duo System

This section summarizes

- how your PowerBook Duo behaves when it is connected to the Duo MiniDock, or when it is moved from one minidock to another
- how to take advantage of the Duo MiniDock's features

Your preferences

The PowerBook Duo uses your preferences -- including desktop pattern, window views, and so forth -- when you dock it. This means that your Macintosh will be customized the way you like it no matter where you work.

Input devices

When your computer is connected to the minidock, you can use any attached input devices, including the keyboard and trackball built into the PowerBook Duo.

Battery recharging

A PowerBook Duo connected to the Duo MiniDock draws power from its battery unless the power adapter is plugged in. If the power adapter is plugged in, the battery recharges while the computer is connected to the minidock. (This is the same way the computer works if it is not docked.)

Power adapter

Always use the power adapter when you connect your PowerBook Duo to a Duo MiniDock supporting an external monitor, external SCSI equipment, a printer, and/or an external modem.

If your Duo MiniDock is supporting only a floppy disk drive, a keyboard, and/or a mouse, you can work without the power adapter if you prefer. However, the battery will discharge faster than it does when the PowerBook is not connected to the minidock.

Power conservation

If you are using an external monitor, the PowerBook will not sleep again until you disconnect it from the minidock.

If you are using only a floppy disk drive, a keyboard, and/or a mouse, the computer sleeps as usual.

Moni tors

If an external monitor is connected to the Duo MiniDock, you can use it as an extension of your PowerBook Duo's built-in screen -- that is, you can drag objects from one screen to another and do your work on either one.

The PowerBook's built-in screen is set to be the main monitor (the one on which the menu bar appears).

You can make an external monitor the main monitor by selecting it in the Monitors control panel. (See "Making Your External Monitor the Main Monitor," earlier in this guide.) The PowerBook's built-in screen is the main monitor whenever the computer is not connected to the minidock.

A feature called video mirroring allows you to display the same Macintosh desktop on two screens at the same time. This feature is useful when you want to do a presentation: you can use the PowerBook screen to see and control what your audience views on a larger screen. Use the PowerBook Display control panel to turn video mirroring on or off.

Hard disks

The PowerBook Duo starts up from its internal hard disk automatically. If you have an external hard disk connected to your Duo MiniDock, that disk's icon also appears when you start up.

You may prefer to start up from the external hard disk when the PowerBook Duo is docked. If so, use system software version 7.1 or later to install a System Folder on that disk, and select it in the Startup Disk control panel. See the instructions on installing system software in the chapter on setting up your programs in your Macintosh PowerBook Duo User's Guide.

If you start up from an external hard disk, the preferences selected on that disk override those selected on your PowerBook Duo. When you use the PowerBook away from the minidock, the computer uses the preferences associated with its own hard disk.

Startup disk surprise? If you select an external hard disk as your startup disk, your PowerBook Duo will start up from any external hard disk that has the same SCSI ID number as the one you selected.

Virtual memory

The PowerBook Duo can borrow space on a hard disk to increase the memory available for using programs. The disk space is called virtual memory.

You can set aside virtual memory space on the hard disk belonging to the PowerBook Duo, or on a hard disk connected to the Duo MiniDock.

If you set aside virtual memory space on a hard disk connected to the minidock, virtual memory will not be available when you use the PowerBook away from the minidock. The next time you dock, virtual memory is turned back on automatically.

If you set aside virtual memory space on the PowerBook's hard disk, virtual memory is always available.

Modem

If you want to use an external modem with your Macintosh Duo System, connect the modem cable to the Duo MiniDock port marked with this icon:

If your computer has an internal modem, select either Internal or External Modem in the PowerBook control panel before opening your telecommunications program.

If you have system problems

If your docked computer crashes (the screen goes blank or fills with gibberish) or freezes (the pointer doesn't move and input devices don't work), press the power button on the back of the minidock.

Pressing the power button erases any information you did not save, but it allows you to restart the system and continue working.

Removing the PowerBook Duo from the Duo MiniDock

- No SCSI devices or external monitor -- use Sleep: If you are not using any SCSI equipment or an external monitor, you can disconnect the PowerBook while the computer is in sleep.
- SCSI devices and/or monitor -- use Shut Down: If you are using SCSI equipment or an external monitor, you must shut down the PowerBook and turn off any SCSI devices before disconnecting.
- !! IMPORTANT: Don't attempt to disconnect anything if the PowerBook is still on. The computer will turn itself off, and you will lose information you did not save. !!

Once the computer is in sleep or shut down, follow these steps:

1. Pull up on the lever at the top of the Duo MiniDock.

You may need to pull up twice to release the lever completely.

2. Gently pull the PowerBook away from the minidock.

If you always plan to use your connected devices in the same location -- at your desk, for example -- you can leave everything in place and simply disconnect the PowerBook Duo from the minidock when you want to move the computer somewhere else.